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Lymphocytoma in a Holstein Bull

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ministered subcutaneously and 700 cc. of an isotonic dextrose and saline solution given intravenously by the drip method.

A urine sample was collected and taken to the laboratory for microscopic examination under dark field illumination. The presence of spirochetes typical of the genus Leptospira was demonstrated.

Necropsy

The patient expired a few hours later and a post-mortem study on the following day revealed lesions typical of the disease. Marked icterus was noted on all mucous membranes, in the fat, and in the subcutaneous connective tissues. A severe hemorrhagic gastritis, duodenitis and jejunitis were seen together with acute toxic hepatitis and hemorrhage of the lungs. The typical absence of extensive oral lesions was also seen.

The case which has been described here is typical of condition caused by the spirochete. It is true that variations are seen from this pattern of symptoms and lesions but the condition as manifested in this area resembles this case closely.

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—D. J. DeValois, '44.

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2 **Canine Gastroenteritis.** Severe untreated cases of gastroenteritis terminate fatally in 2 to 7 days. In less severe cases death may occur from exhaustion in 1 to 2 weeks. Recovery in any instance is slow and convalescence is prolonged. The most unfavorable symptoms are great acceleration of pulse, profuse and hemorrhagic diarrhea, obstinate constipation, dehydration, anuria, intoxication and injected hemorrhagic mucous membranes followed by rapid emaciation and finally exhaustion.

On June 11, 1944, a 4-year-old Boston Terrier bitch was brought to the Stange Memorial Clinic with a history of having been off feed since June 5, and vomiting since June 7. Examination revealed the animal weak and depressed. The mucous membranes were injected and a sweetish odor was detected on the breath. Extreme dehydration was also noted. A diagnosis of gastroenteritis was made and symptomatic treatment begun.

An intravenous injection of 600 cc. of normal saline containing 3.5 percent dextrose was given on the first and again on the second day after admission in an effort to allay the dehydration and intoxication. The dog was observed to be taking water on the third day so intravenous injections were suspended for 2 days. The saline and dextrose administration was repeated on the fifth day.

The sixth day after entrance the saline injections were again suspended and thereafter the animal's own water intake was sufficient to overcome dehydration. The patient was allowed to exercise as her condition improved. It was noted that the depression was reduced greatly when out of doors. Feces were passed for the first time during treatment. These were passed with difficulty and showed evidence of blood. A fecal examination was made and found negative for parasite ova. Two No. 11 kaolin capsules were given on the seventh and eighth days. The frequent administration of peptone was continued. The dog began to eat solid food on the ninth day, at which time 2 No. 11 capsules of kaolin were given as the feces still showed evidence of blood. Exercise and the koalin protective capsules were continued until the dog was released 5 days later. During this time the dog showed a steady improvement.

When the case was dismissed from the hospital the owner was advised to give a No. 11 capsule of kaolin as often as the dog's condition indicated.

—M. J. McDermid, '45

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3 **Lymphocytoma in a Holstein Bull.** On May 27, a 7-year-old Holstein bull was brought to the Stange Memorial

Clinic. It showed an enlargement on the left side in the area of the prefemoral lymph nodes and another below the paralumbar fossa on the same side. According to the owner, these growths had been present for several weeks. The owner also indicated that the animal had been off feed.

Examination revealed a watery diarrhea and a bloated condition. The latter was apparently chronic as the animal showed evidence of having been trochared twice previously. The bloat recurred several times during the animal's stay at the clinic. The blood count was normal.

Palpation per rectum revealed a growth about 30 cm. in diameter just to the right of the vertebrae at the anterior end of the pelvic cavity. A biopsy specimen of the growth in the prefemoral area was taken and diagnosis of lymphocytoma was subsequently made.

On June 7, the animal was taken to the post-mortem laboratory and destroyed by electrocution. Examination at this time revealed massive lymphocytomatosis, especially of the visceral lymph nodes, several weighing a pound or more. The splenic corpuscles were hyperplastic. No metastasis to the adjacent organs was noted.

Usual Picture

Bovine lymphocytoma as an entity has received relatively little attention or investigation. It has been concluded by Creech and Bunyea that this disease is non-transmissible and is not caused by anything of an infectious origin. The disease is usually attended by a failure to eat at some time during its course. The tendency to bloat is often noted, as is posterior or even general paralysis. The fact that any lymph node in the body may be affected makes possible the great variety of symptoms at different times noted. It must be said that the blood pictures, while often showing a differential count approaching or exceeding 65 percent lymphocytes, is at times normal and may at times show itself subnormal.

Lymphocytoma of food animals occurs by far the most commonly in cattle. The following figures from the Federal Meat Inspection Service indicate the ratio of condemnation of some of the species: cattle, 1 in 8500; calves, 1 in 149,000; horses, 1 in 201,000; swine, 1 in 220,000 and sheep, 1 in 1,174,000.

—*Lyle Scott Jr., '45*

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2. W. L. Boyd. Clinical observations of lymphoid hyperplastic diseases of cattle. Cornell Vet. 24 (1):18-24.

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4 **Unusual Coxo-femoral Luxation.** In discussing coxo-femoral luxations in the dog, it is to be emphasized that anatomy does not play a major role in determining the type of luxation. In the dog, as in the human, the direction of the force causing the luxation is the determining factor. The most common dislocation is the superior-anterior type in which the acetabulum is forced below the head of the femur. The superior-anterior type of luxation is most commonly caused by a blow directed at the body thus snapping the ilium downward while inertia holds the leg stationary. However, in rare conditions, one of which will be discussed later, the leg receives the force of the blow. In this case the ilium remains stationary while the head of the femur is forced ventral to the ilium.

The patient that stimulated interest in this condition was a 4-year-old male Boston Terrier presented at the Stange Memorial Clinic on June 21, 1944. A general examination revealed the limb to be fixed in a backward, adducted position, upon which the animal refused to stand. These symptoms indicated a luxation. To facilitate further examination the animal was anesthetized with nembutal. A fluoroscopic examination was made to determine the relationship of the structures involved. It was observed that the head of the femur was ventral to the ilium as well as medial and anterior to the acetabulum. This represents one of the aforementioned rare luxations.